**Legal Name**

Social and Environmental Entrepreneurs (SEE)

**AKA Name**

Solar Manhattan Project

**Mission Statement**

The Solar Manhattan Project is a new nonprofit organization based in Orange County. Our mission is to provide educational programs regarding solar and wind power technology for schools and colleges. For elementary school students, we will provide an interactive learning presentation that will inspire and educate about renewable energy technology. For junior high school, high school, and college students, we will provide proper career path choices for various aspects of the renewable energy industry. By this combined educational mission, we will assist our society in the transition away from conventional power sources, primarily coal-fired electric generation, to renewable sources. We intend to initially begin programs affecting Orange County, Los Angeles County, and San Diego County students.

Renewable energy is becoming a major growth industry in the United States. We believe that concentrating solar power and the newest photovoltaic technologies will be the primary power sources for the 21st Century, in addition to advanced wind turbines and energy storage technologies. However, at the rate renewable energy is coming into play in the United States, it is distressing to see the lack of educational emphasis and awareness. Students are not being properly educated, beginning at an early age, about the need for and application of renewable energy technologies, and there is not enough direction to guide students into proper career paths for the renewable energy industry.

Therefore, the Solar Manhattan Project hopes to help bolster educational efforts regarding renewable energy technology in schools. We hope that by having interactive audio-visual presentations, we will capture each of our intended audiences, and therefore help educate and prepare students for the renewable energy industry.

**Current Programs**

The Solar Manhattan Project is a new nonprofit organization. Therefore, we are in the stage of planning our initial programs which we are currently seeking funding for. Our primary concern at this time is to develop and produce our intended presentations so that we may begin our programs as soon as possible. In addition to planning our school educational presentations, we are also developing educational presentations about renewable energy technology that will be given to industry. However, we are only seeking funding from the Motorola Foundation for the school educational presentations.

**Accomplishments**

The Solar Manhattan Project is a new organization that is in the development phase of an exciting new educational format program. We have joined with a fiscal sponsor (SEE), which found our program a unique and important educational tool. This teaming arrangement has made it possible to immediately be recognized as a 501(c)(3) nonprofit organization and receive funding for our intended projects. Much of our effort to date has been focused on publicity, including attending trade shows. We have already spent months of research studying various technologies and interviewing prominent people in the solar and wind industry, as well as teachers and others in the educational department. This has allowed us to begin planning elements of the proposed project, including: presentation techniques, ways to create original cartoon characters, and meeting with green-minded people who may be interested in contributing to our cause. We are currently expanding and upgrading our website, which will include a blog/news bulletin that should be informative to interested parties. We have talked with various celebrities and their representatives who have expressed interest in supporting our project financially or directly with presentation production.

**Program Title**

Solar Manhattan Project-Educational Presentations

**Program Description**

Currently, the Solar Manhattan Project is developing programs for different student levels. Two program levels are geared towards elementary students, and one is geared towards junior high through university aged students. The elementary program will be the first program developed. We expect these presentations to last 60 to 70 minutes.

Elementary Student Presentations Content

* The rudiments of electrical energy production
* Conventional electrical generation methods (i.e. coal, natural gas and nuclear power)
* Consequences of using conventional energy
* Introduction of renewable energies
* Specific renewable energy technologies
* Conservation tips
* Q&A

This program’s presentation will be tailored to meet the needs of younger children. However, the program will be divided into two levels based on student age. A second-third grader would see a slightly different presentation than a fourth-sixth grader would. The objective of the elementary school program is to inspire the students and leave a lasting impression with them about the potential of renewable energy technologies, so that when they become older they can implement this knowledge in their career choices and lifestyles.

The junior high-university programs will once again be split into different content levels by age, and be overall more advanced than the elementary program. We expect these presentations to last 75 to 90 minutes.

* Electrical energy production
* In depth conventional electrical generation methods (i.e. coal, natural gas and nuclear power)
* Consequences of using conventional energy
* Introduction of renewable energies
* In depth specific renewable energy technologies
* Future renewable energy sources
* Career path guidance
* Conservation tips
* Q&A

While with the elementary students we wish to “plant a seed”, we are making valiant effort to drive these older students into the renewable energy industry. These presentations will specifically advise what the appropriate majors and trade school programs will prepare them for entering this industry in the near future.

During the production of the presentation, numerous reputable people will film cameo answers, in response to predicted questions. We are expecting cameo answers from green-minded celebrities, scientists and engineers, teachers, and solar and wind industry experts. Therefore, when one of these questions is asked by a student, the moderator will bring up the cameo video answer, making the entire experience seem more interactive.

Presentation Production Tasks

* Research: Much research must be done in order to ensure that every piece of information that goes into the presentations is updated and accurate.
* Review: Once the research has been completed, the best material to convey our message will be selected for the presentation content.
* Documentation: When we have selected the appropriate material, we will begin to develop the storyboard and script in order to have well-structured presentations.
* Creation: We will need to outsource a production company to help us put our presentations together with educational slides, video clips, and possible graphic design. The presentations will then need to be edited professionally with sound. We will also need to obtain our own equipment in order to record some cameos, and also specialized equipment to be used during the presentations.
* Final Review: The produced videos will need to be properly structured within the moderator’s live presentation. Special equipment will need to be set up in order to make part of the interaction possible (i.e. “canned” Q&A answers).
* Marketing: Once the production is finished, and the presentations are organized, it will be very important for one or more people to research local schools in the targeted counties and to help advertise our services to them in order to book many presentations and receive possible future funding for our programs.

When we produce the presentations, copies will be made onto DVD so that schools who do not wish to hold an assembly, or schools we are unable to visit, have the option to use the DVD presentation in the classroom. Although they will not get the live interaction that the moderator-led presentations will provide, the students will at least be exposed to educational information about solar and wind technology.

In addition to the produced video, we plan to also display educational models during the presentations to not only be more interactive, but to also give a clearer picture of what we are teaching the students.

Initially, the Solar Manhattan Project will be visiting interested schools in the Los Angeles, Orange, Riverside and San Diego counties for assemblies. The initial presentations will be conducted by moderators and several volunteers and/or interns. We hope to be able to offer these services for free provided we achieve proper funding. Eventually, we plan to move our operations into a building with a large theater so that we may hold presentations at our facilities for field trips and other community interest.

**Program Description (Short)**

The Solar Manhattan Project will be conducting educational presentations focusing on solar and wind technology, to various schools in the Los Angeles, Orange, Riverside and San Diego counties. The participating students will be elementary-university aged.

**How Does the Program Teach Innovation or Entrepreneurship?**

The Solar Manhattan Project is teaching innovation by creating an early awareness for students to become more directly involved as they go through the educational process. We feel that education is the number one long-term approach to solving any problem. There is a general lack of knowledge about solar and wind technologies and their proper application. We feel that by educating and inspiring the students about renewable energy, with our focus on wind and solar, there is a higher chance that the inspired students will actively pursue a future career that involves these renewable energy technologies.

The more advanced presentations will have a strong focus on providing guidance and various pathways that interested students may take in order to succeed in this growing industry. We hope that by educating in a fun and stimulating way, we will encourage students of any age to seek out more education involving renewable energy technology. We hope that through this process we will foster innovation and create a strong desire for students to enter the science industry so that better and advanced renewable energy technologies will be developed, furthering our country and planet to become more sustainable.

**Needs or Problems**

As previously stated, there is a serious problem arising in not only California, but the entire United States regarding education.

In 2009, Orange County's 28 k-12 school districts cut more than $200 million from their budgets. It is estimated that the Los Angeles Unified School District will cut up to $279 million this year. There is a current proposal in San Diego County for a budget cutback of approximately $39 million as well as a contract offer that will decrease educators’ pay by 8 percent. Districts have increased class sizes, cut various programs, laid off hundreds of employees and eliminated other services.

Alarmingly, the science department has been majorly affected by these cutbacks. According to the authors of *Nurturing and Sustaining Effective Programs in Science Education for Grades K-8: Building a Village in California: Summary of a Convocation*, “K-8 students in California spend too little time studying science, many of their teachers are not well prepared in the subject, and the support system for science instruction has deteriorated… California has ranked near the bottom of all states in the percentage of fourth graders at or above proficiency in science.”

In addition to the poor economy, since the passage of the 2001 *No Child Left Behind Act*, there has been a great stress upon schools to improve reading and mathematics, but not science. Therefore, California’s educational system is significantly decreasing focus on the science industry, while other states and even other countries (notably China and India) are in fact leaving California students very far behind in science education.

Need for renewable energy

It is our fear that if schools are not equipped to properly educate students about renewable energy, it is only going to set our nation back even further in technology innovation and continue to prevent us from becoming sustainable.

**Publicity Plan**

The Solar Manhattan Project has already been attending green conventions and getting sign up lists of interested schools that wish to have presentations in the near future. We plan to attend and exhibit at many more this year, including some large Earth Day events. In addition, we have been approaching green-minded celebrities and members of local universities about our projects.

We are currently working on our website that, once fully developed, will provide a lot of educational material for interested parties to learn more about solar and wind technology and to contact us for more information. We have applied for Google Grants, which will give us access to Google Ads for free if we are accepted. If we are able to use Google Ads, we will have much more exposure on the internet based on relevant searches

Once we are finished with the production of our presentations, we will be doing a mailing campaign out to all the school districts in the Los Angeles, Orange, and San Diego counties. We will be sending information that will promote our mission and services offered.

**Request Amount**

**Service Area Description**

The Solar Manhattan Project currently intends to provide services to school districts within Los Angeles, Orange, Riverside and San Diego counties.

**Evaluation Process**

The Solar Manhattan Project feels we would be successful in the first year of funding if we have not only completed our educational presentation production, but have also began to give presentations to schools in Los Angeles, Orange, and San Diego counties. If, by fall of 2010, we are actively giving several presentations a week to interested schools, we believe this would be immediate short-term success.

Another way we will measure short-term success is by asking schools that received a presentation to submit a satisfaction survey shortly after our visit. This way we will hopefully get helpful feedback in order to improve upon our presentation methods and potentially build stronger relationships with the schools so that we may give annual presentations.

Computer survey

However, our overall approach is based on **long-term** goals, and therefore the true success of our programs will not be evident straight away. Our program’s success will be measured in the future when more students in the areas we present to show more interest in studying, and eventually joining the renewable energy industry.

How many primary people will be affected by our program in one year? 5-20,000

How many secondary people will be affected by our program in one year? 10-40,000

**Program Budget**

Research for presentations:

Video production: ~2,500 x 4 =10,000

Models:

Handouts:

DVD copies:

Transportation:

Publicity:

Fiscal Start/End Date

Insurance:

Equipment:

\*What other sources of income will be used for the project? (If applicable)

|  |  |  |
| --- | --- | --- |
| **Income Source** | **Comments** | **Amount** |
| Foundation Grants |  | 120,000 |
| Government Grants |  | 80,000 |
| Donations From Individuals |  | 25,000 |
| Donations From Businesses |  | 75,000 |
| Membership Fees |  | 0 |
| Sales of Goods or Services | Donation and subsequent sale of 3 commercial 140kW wind turbines. | 180,000 |
| **Total** |  | **480,000** |

***Year Budget Submitted to SEE***

***Solar Project* First Year Budget**

**EXPENSE** (amounts

|  |  |  |
| --- | --- | --- |
| **Expense Source** | **Comments** | **Amount** |
| SEE Fiscal Fees  (6.5% of Total Income) |  | 31,200 |
| Advertising |  | 6,000 |
| Bank Charges |  | 250 |
| Conferences & Meetings |  | 5,000 |
| Consultants | Primary compensation for independent panel experts. | 25,000 |
| Equipment | Computers, models, projectors. | 5,000 |
| Insurance | General liability. | 2,000 |
| Internet & E-mail |  | 1,800 |
| Legal fees |  | 7,500 |
| Licenses & Permits |  | 300 |
| Maintenance & Repairs |  | 500 |
| Materials (non office) |  | 1,500 |
| Meals |  | 1,000 |
| Membership Fees |  | 950 |
| Office Supplies |  | 1,000 |
| Postage and Courier Services |  | 1,800 |
| Printing and Copying |  | 10,000 |
| Publications |  | 2,000 |
| Rent |  | 60,000 |
| Research and Documentation |  | 24,000 |
| Storage |  | 0 |
| Telephone |  | 4,000 |
| Travel |  | 22,000 |
| Utilities (gas, electric, telephone) |  | 36,000 |
| Other | Staff salary. | 200,000 |
| **TOTAL EXPENSE** |  | **448,800** |